Securalert™

GENERATION II

Quick STARTUP

INSTALLATION GUIDE

Revision september 2008

Version 1

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1.0 General description

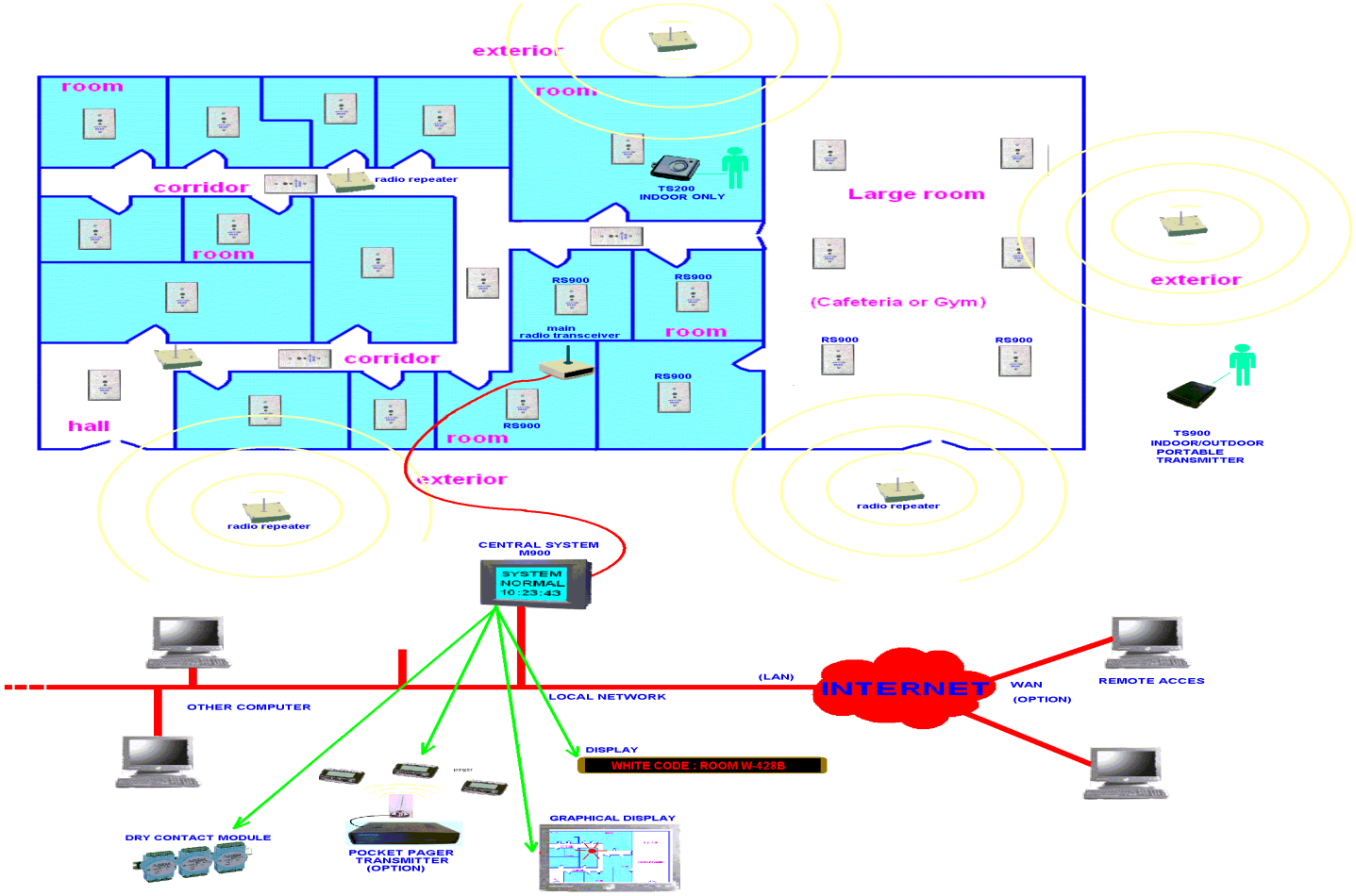
The Securalert generation II is the most advanced system to locate precisely and rapidly a person in distress inside or outside a building. The use of bi-directional radio frequency and ultrasonic signals combined with an IP server monitoring station, give a complete supervised locating system.

MASTER CENTRAL SYSTEM

A unique feature of the Securalert system is the full bi-directional radio communication. This element offers two major advantages:
-A reliable radio communication that acknowledges every message with capacity to retry.
-A bi-directional supervision of all the elements. Not only the central monitor operation of all devices but each device (local receiver and transmitter) can detect a problem with the central and give a positive or negative feedback to the user.

The basic system consists of a central with a radio transceiver, a number of ultrasonic receivers and/or fixed buttons receivers and also portable transmitters. Additional parts can be added to increase features like Radio repeater to increase the radio range of the system, a monitor/buzzer/reset unit to supervise the central and to give a loud audible signal of alarm, a forbidden zone beacon to prevent portable unit to exit a facility and a whole lot of output interfaces to match any need: dry contact output, voice messages, graphical or message panel, OPC compatible equipments, SMS, email, pocket paging, etcetera.

1.1 Securalert ™ Typical Topology



1.2 Specifications (short list)

Central station

PC Computer base Parameters:	Pentium IV or better
Operating system:	Windows XP, Java VM
RAM:	512Mb
Speed:	500MHz
Hard disk:	1Gb minimum
Port (min):	1 serial, 2 USB
Port (recommended:	Ethernet, 4 USB, 2 serial
Number of device ID possible:	65536 (including all devices)
Parameters available for each device:	-32 character labels, graphical location on map (x, y, z position), graphical map (1 to 10), active or not, real time battery, rf signal strength, state (alarm, idle, standby) and cover status, last time report, (last position for transmitter)

Radio communication

Protocol:	802.15.4
Frequency:	ISM 2,4GHz
Modulation:	DSSS (Direct Sequence Spread Spectrum)
RF sensitivity	-100bDm
Maximum Transmit power:	60mW (18dBm) conducted 100mW(20dBm) EIRP
Adjustable power:	
Number of channels:	minimum 10dBm
RF data rate:	12
Minimum coverage range:	250,000 bps 100' (30m)

Viewer interface

Type of display:	-Graphic (floor plan from BMP image, in color) -List view (all device on the screen) -Message screen (only current activity) -Configuration table (administrator only)
Level of right:	-Administrator (all right) -User (view data and acknowledgement alarm) -View (view only)
Basic Features:	Wave files play on each event (wave files provided by customer).

Main radio and repeater

Housing dimensions:	15" x 8,50" x 17" 380mm X215mm X 430mm
Weight:	30 lb. (13,6Kg)
Power requirement:	120Vac 2A
Operating environment :	: 32°F to 85°F,up to 95% relative humidity (no condensation)

Receiver and portable transmitter

See respective datasheets

1.3 Basic component.

		
M900 *Central system*	*RS900* *fixed receiver*	*TS200* *portable tranmitter*

2.0 Installation requirement

Installation and start up of this equipment require certain qualifications. It MUST only be done by a qualified technician, electrician and/or an experienced person.

Knowledge required:

-Basic knowledge in electricity.

Being able to evaluate power requirement (voltage (volts), current (amperes), power (watts).

-Basic knowledge in electronics.

Knowledge on operation of a multimeter. Being able to determine polarity of signal.

-Medium knowledge in computers.

The installer should know how to power a computer, start and operate the Windows XP™ environment.

-Basic knowledge in installation.

The installer must know the regulations, rules and laws, either local, regional or national, concerning the installation of this kind of equipment.

It is the responsibility of the installer to master theses skills or to subcontract to someone qualified.

Optional:

If the system is to be connected to a network (LAN):

-High knowledge in networking (administrator level or closed).

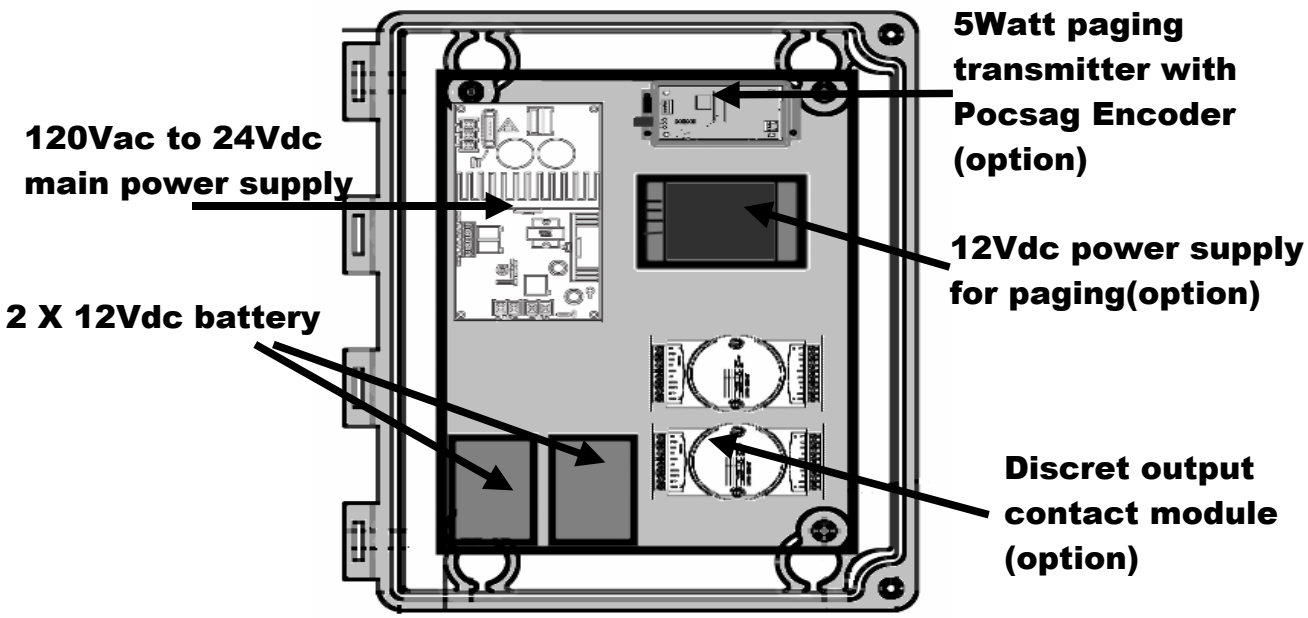
-If the system is to be connected to other equipment (through serial port or dry contact module):

High knowledge of the other equipment and high level of communication protocol and interfacing.

If the system is to be used with the pocket paging module:

Basic knowledge in radio communication.

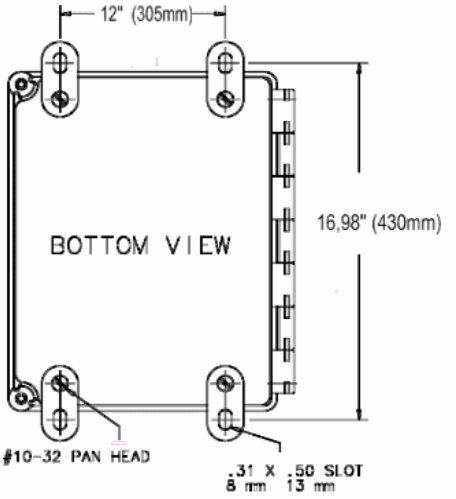
3.0 Central system detailed view (bottom layer, with main computer removed)



3.1 Installation of the Central system

All the equipments are installed in a single enclosure.

1-Find a proper place to install the main enclosures, on solid surface, on a wall. The wall must be able to handle 200 lbs of weight. There must be sufficient place for the case with the door fully opened. A surface of 32" " wide by 20" high is required.

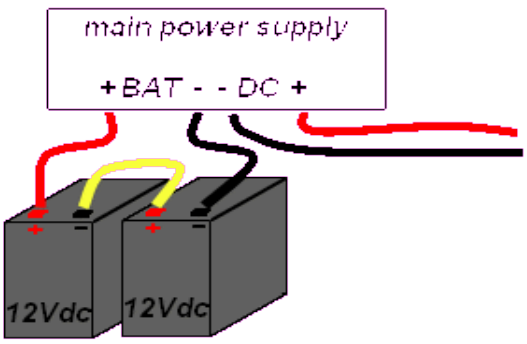


2-Instal the enclosure by tapping screw on the top corner of the box. Additional screw can be added if necessary by drilling directly to the bottom of the case (remove the bottom panel before drilling in the bottom).

3-Connect the power cord to an electrical outlet (120Vac, 3A).

4- On the main power supply unit, notice a green led turn on (center of the board) and a red led (bottom of the board).

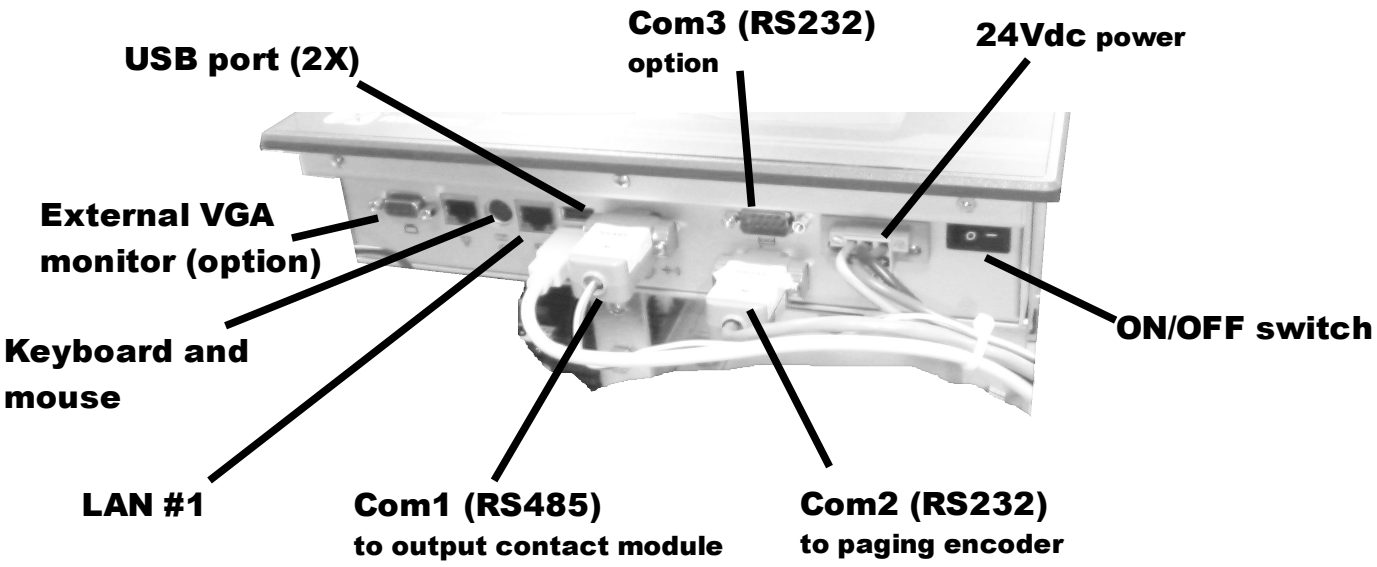
5-Connect the battery with respect to the following wire colors: positive (red wire) on the + of one battery. Negative (black wire) on the – of the other battery. Yellow wire between remaining tab of the battery.



6-If the unit is to be connected to a LAN, connect the CAT-5 cable to the LAN #1 connector.

7-Turn on the Main computer unit by switching the ON/OFF switch.

3.2 Main CPU connection



3.3 Software STARTUP

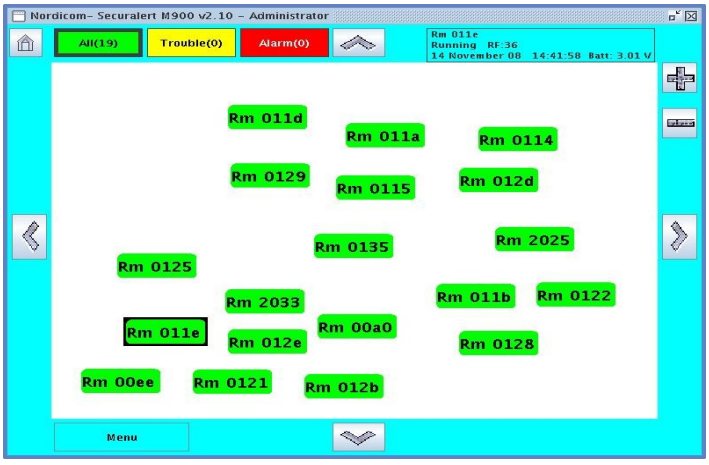
1-After powering ON of the main CPU, the Windows XP logo will appear for about 1 minute.
2-You will then see the Welcome message for about 1 minute.
3-Wait until you see this screen:

4-In Client Password window,
type: lala, then the OK button.

Note: **lala** is the default administrator login name, it is written in lowercase.

The default user login name is **lulu.**

To activate the on-screen keyboard, type the keyboard buttons.



The next window will be the main interface of the M900 master software. From now on, the system is ready to be configured. See the M900 programming manual for operation of the M900 software.